

77

526 Rec'd PCT/PTO 13 NOV 2000

SEQUENCE LISTING

<110> The University of Queensland
 National Institute of Biological Standards and Control

<120> Novel anti-fibrinolytic agents

<130> Textilinins

<140> PCT/AU99/0XXX

<141> 1999-05-10

<150> AU PP3450

<151> 1999-05-11

<160> 44

<170> PatentIn Ver. 2.0

<210> 1

<211> 180

<212> DNA

<213> Pseudonaja textilis

<220>

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<222> (1)..(180)

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Lys	Asp	Arg	Pro	Asp	Phe	Cys	Glu	Leu	Pro	Ala	Asp	Thr	Gly	Pro	Cys	
1	5							10						15		

aga	gtc	aga	ttc	cca	tcc	ttc	tac	tac	aac	cca	gat	gaa	aaa	aag	tgc	96
Arg	Val	Arg	Phe	Pro	Ser	Phe	Tyr	Tyr	Asn	Pro	Asp	Glu	Lys	Lys	Cys	
20								25					30			

cta	gag	ttt	att	tat	ggg	gga	tgc	gaa	ggg	aat	gct	aac	aat	ttt	atc	144
Leu	Glu	Phe	Ile	Tyr	Gly	Gly	Cys	Glu	Gly	Asn	Ala	Asn	Asn	Phe	Ile	
35								40					45			

acc	aaa	gag	gaa	tgc	gaa	agc	acc	tgt	gct	gcc	tga	180
Thr	Lys	Glu	Glu	Cys	Glu	Ser	Thr	Cys	Ala	Ala		
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<212> PRT

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Lys Asp Arg Pro Asp Phe Cys Glu Leu Pro Ala Asp Thr Gly Pro Cys
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Arg Val Arg Phe Pro Ser Phe Tyr Tyr Asn Pro Asp Glu Lys Lys Cys
 20 25 30

Leu Glu Phe Ile Tyr Gly Gly Cys Glu Gly Asn Ala Asn Asn Phe Ile
 35 40 45

Thr Lys Glu Glu Cys Glu Ser Thr Cys Ala Ala
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 Lys Asp Arg Pro Glu Leu Cys Glu Leu Pro Pro Asp Thr Gly Pro Cys
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aga gtc aga ttc cca tcc ttc tac tac aac cca gat gaa caa aaa tgc 96
 Arg Val Arg Phe Pro Ser Phe Tyr Tyr Asn Pro Asp Glu Gln Lys Cys
 20 25 30

cta gag ttt att tat ggt gga tgc gaa ggg aat gct aac aat ttt atc 144
 Leu Glu Phe Ile Tyr Gly Cys Glu Gly Asn Ala Asn Asn Phe Ile
 35 40 45

acc aaa gag gaa tgc gaa agc acc tgt gct gcc tga 180
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 50 55 60

<210> 4
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 1 5 10 15

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Leu Glu Phe Ile Tyr Gly Gly Cys Glu Gly Asn Ala Asn Asn Phe Ile
 35 40 45

79
iii

Thr Lys Glu Glu Cys Glu Ser Thr Cys Ala Ala
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Lys Asp Arg Pro Asn Phe Cys Lys Leu Pro Ala Glu Thr Gly Arg Cys
1 5 10 15

aat gcc aaa atc cca cgc ttc tac tac aac cca cgt caa cat caa tgc 96
Asn Ala Lys Ile Pro Arg Phe Tyr Tyr Asn Pro Arg Gln His Gln Cys
20 25 30

ata gag ttt ctc tat ggt gga tgc gga ggg aat gct aac aat ttt aag 144
Ile Glu Phe Leu Tyr Gly Cys Gly Asn Ala Asn Asn Phe Lys
35 40 45

acc att aag gaa tgc gaa agc acc tgt gct gca tga 180
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35 40 45

Thr Ile Lys Glu Cys Glu Ser Thr Cys Ala Ala
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<210> 7
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PCT/AU99/00343
YD

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1 5 10 15

aaa ggc aac gtc cca cgc ttc tac tac aac gca gat cat cat caa tgc 96
Lys Gly Asn Val Pro Arg Phe Tyr Tyr Asn Ala Asp His His Gln Cys
20 25 30

cta aaa ttt att tat ggt gga tgt gga ggg aat gct aac aat ttt aag 144
Leu Lys Phe Ile Tyr Gly Gly Cys Gly Asn Ala Asn Asn Phe Lys
35 40 45

acc ata gag gaa ggc aaa agc acc tgt gct gcc tga 180
Thr Ile Glu Glu Gly Lys Ser Thr Cys Ala Ala
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<213> Pseudonaja textilis

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35 40 45

Thr Ile Glu Glu Gly Lys Ser Thr Cys Ala Ala
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PCT/AU99/00343

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aag gac cgt cca aaa ttc tgt gaa ctg ctt cct gac acc gga tca tgt	48
Lys Asp Arg Pro Lys Phe Cys Glu Leu Leu Pro Asp Thr Gly Ser Cys	
1 5 10 15	

gaa gac ttt acc gga gcc ttc cac tac agc aca cgt gat cgt gaa tgc	96
Glu Asp Phe Thr Gly Ala Phe His Tyr Ser Thr Arg Asp Arg Glu Cys	
20 25 30	

ata gag ttt att tat ggt gga tgc gga ggg aat gct aac aat ttt atc	144
Ile Glu Phe Ile Tyr Gly Gly Cys Gly Asn Ala Asn Asn Phe Ile	
35 40 45	

acc aaa gag gaa tgc gaa agc acc tgt gct gcc tga	180
Thr Lys Glu Glu Cys Glu Ser Thr Cys Ala Ala	
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Glu Asp Phe Thr Gly Ala Phe His Tyr Ser Thr Arg Asp Arg Glu Cys	
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Ile Glu Phe Ile Tyr Gly Gly Cys Gly Asn Ala Asn Asn Phe Ile	
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Lys Asp Arg Pro Lys Phe Cys Glu Leu Pro Ala Asp Ile Gly Pro Trp	
1 5 10 15	

gat gac ttt acc gga gcc ttc cac tac agc cca cgt gaa cat gaa tgc	96
Asp Asp Phe Thr Gly Ala Phe His Tyr Ser Pro Arg Glu His Glu Cys	
20 25 30	

ata gag ttt att tat ggt gga tgc aaa ggg aat gct aac aac ttt aat	144
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82 ✓

Ile Glu Phe Ile Tyr Gly Gly Cys Lys Gly Asn Ala Asn Asn Phe Asn
 35 40 45

acc caa gag caa tgc gaa agc acc tgt gct gcc tga 180
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<213> Pseudonaja textilis

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Asp Asp Phe Thr Gly Ala Phe His Tyr Ser Pro Arg Glu His Glu Cys
 20 25 30

Ile Glu Phe Ile Tyr Gly Gly Cys Lys Gly Asn Ala Asn Asn Phe Asn
 35 40 45

Thr Gln Glu Gln Cys Glu Ser Thr Cys Ala Ala
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gag gtg ctg acc ccc gtc tcc agc 72
 Glu Val Leu Thr Pro Val Ser Ser
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<210> 14

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<212> PRT

<213> Pseudonaja textilis

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83
yit

Glu Val Leu Thr Pro Val Ser Ser
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-20 -15 -10

gag gtg ctg acc ccc gtc tcc agc aag gac cgt ccg gat ttc tgt gaa 96
 Glu Val Leu Thr Pro Val Ser Ser Lys Asp Arg Pro Asp Phe Cys Glu
 -5 -1 1 5

ctg cct gct gac acc gga cca tgt aga gtc aga ttc cca tcc ttc tac 144
 Leu Pro Ala Asp Thr Gly Pro Cys Arg Val Arg Phe Pro Ser Phe Tyr
 10 15 20

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tac aac cca gat gaa aaa aag tgc cta gag ttt att tat ggt gga tgc 192
Tyr Asn Pro Asp Glu Lys Lys Cys Leu Glu Phe Ile Tyr Gly Gly Cys
   25          30          35          40

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gaa ggg aat gct aac aat ttt atc acc aaa gag gaa tgc gaa agc acc 240
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 45 50 55

tgt gct gcc tga 252
Cys Ala Ala
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<213> *Pseudonaja textilis*

<400> 16
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Glu Val Leu Thr Pro Val Ser Ser Lys Asp Arg Pro Asp Phe Cys Glu
20 25 30

84 VIII

Leu Pro Ala Asp Thr Gly Pro Cys Arg Val Arg Phe Pro Ser Phe Tyr
 35 40 45

Tyr Asn Pro Asp Glu Lys Lys Cys Leu Glu Phe Ile Tyr Gly Gly Cys
 50 55 60

Glu Gly Asn Ala Asn Asn Phe Ile Thr Lys Glu Glu Cys Glu Ser Thr
 65 70 75 80

Cys Ala Ala

<210> 17

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<212> DNA

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 Met Ser Ser Gly Gly Leu Leu Leu Leu Leu Gly Leu Leu Thr Leu Trp
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48

gag gtg ctg acc ccc gtc tcc agc aag gac cgt cca gag ttg tgt gaa
 Glu Val Leu Thr Pro Val Ser Ser Lys Asp Arg Pro Glu Leu Cys Glu
 -5 -1 1 5

96

ctg cct cct gac acc gga cca tgt aga gtc aga ttc cca tcc ttc tac
 Leu Pro Pro Asp Thr Gly Pro Cys Arg Val Arg Phe Pro Ser Phe Tyr
 10 15 20

144

tac aac cca gat gaa caa aaa tgc cta gag ttt att tat ggt gga tgc
 Tyr Asn Pro Asp Glu Gln Lys Cys Leu Glu Phe Ile Tyr Gly Gly Cys
 25 30 35 40

192

gaa ggg aat gct aac aat ttt atc acc aaa gag gaa tgc gaa agc acc
 Glu Gly Asn Ala Asn Asn Phe Ile Thr Lys Glu Glu Cys Glu Ser Thr
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240

tgt gct gcc tga
 Cys Ala Ala
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252

<210> 18

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<213> Pseudonaja textilis

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<210> 19
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Met Ser Ser Gly Gly Leu Leu Leu Leu Gly Leu Leu Thr Leu Trp
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gag gtg ctg acc ccc gtc tcc agc aag gac cgt cca aat ttc tgt aaa 96
Glu Val Leu Thr Pro Val Ser Ser Lys Asp Arg Pro Asn Phe Cys Lys
-5 -1 1 5

ctg cct gct gaa acc gga cga tgt aat gcc aaa atc cca cgc ttc tac 144
 Leu Pro Ala Glu Thr Gly Arg Cys Asn Ala Lys Ile Pro Arg Phe Tyr
 10 15 20

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tac aac cca cgtcaa cat caatgc ata gag ttt ctc tat ggt gga tgc 192
Tyr Asn Pro Arg Gln His Gln Cys Ile Glu Phe Leu Tyr Gly Gly Cys
25 30 35 40

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gga ggg aat gct aac aat ttt aag acc att aag gaa tgc gaa agc acc 240
 Gly Gly Asn Ala Asn Asn Phe Lys Thr Ile Lys Glu Cys Glu Ser Thr
 45 50 55

tat act qca tqa 252

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Cys Ala Ala

<210> 20
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<213> *Pseudonaja textilis*

<400> 20
Met Ser Ser Gly Gly Leu Leu Leu Leu Leu Gly Leu Leu Thr Leu Trp
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Glu Val Leu Thr Pro Val Ser Ser Lys Asp Arg Pro Asn Phe Cys Lys
20 25 30

Leu Pro Ala Glu Thr Gly Arg Cys Asn Ala Lys Ile Pro Arg Phe Tyr
35 40 45

Tyr Asn Pro Arg Gln His Gln Cys Ile Glu Phe Leu Tyr Gly Gly Cys
 50 55 60

Gly Gly Asn Ala Asn Asn Phe Lys Thr Ile Lys Glu Cys Glu Ser Thr
 65 70 75 80

Cys Ala Ala

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Glu Val Leu Thr Pro Val Ser Ser Lys Asp His Pro Lys Phe Cys Glu
-5 -1 1 5

ctc cct gct gaa acc gga tca tgt aaa ggc aac gtc cca cgc ttc tac 144
 Leu Pro Ala Glu Thr Gly Ser Cys Lys Gly Asn Val Pro Arg Phe Tyr
 10 15 20

tac aac gca gat cat cat caa tgc cta aaa ttt att tat tat ggt gga tgc 192

80

Tyr Asn Ala Asp His His Gln Cys Leu Lys Phe Ile Tyr Gly Gly Cys
25 30 35 40

gga ggg aat gct aac aat ttt aag acc ata gag gaa ggc aaa agc acc 240
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45 50 55

tgt gct gcc tga 252
Cys Ala Ala
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<213> Pseudonaja textilis

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20 25 30

Leu Pro Ala Glu Thr Gly Ser Cys Lys Gly Asn Val Pro Arg Phe Tyr
35 40 45

Tyr Asn Ala Asp His His Gln Cys Leu Lys Phe Ile Tyr Gly Gly Cys
50 55 60

Gly Gly Asn Ala Asn Asn Phe Lys Thr Ile Glu Glu Gly Lys Ser Thr
65 70 75 80

Cys Ala Ala

<210> 23
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gag gtg ctg acc ccc gtc tcc agc aag gac cgt cca aaa ttc tgt gaa 96

88
xii

Glu Val Leu Thr Pro Val Ser Ser Lys Asp Arg Pro Lys Phe Cys Glu
 -5 -1 1 5

ctg ctt cct gac acc gga tca tgt gaa gac ttt acc gga gcc ttc cac 144
 Leu Leu Pro Asp Thr Gly Ser Cys Glu Asp Phe Thr Gly Ala Phe His
 10 15 20

tac agc aca cgt gat cgt gaa tgc ata gag ttt att tat ggt gga tgc 192
 Tyr Ser Thr Arg Asp Arg Glu Cys Ile Glu Phe Ile Tyr Gly Gly Cys
 25 30 35 40

gga ggg aat gct aac aat ttt atc acc aaa gag gaa tgc gaa agc acc 240
 Gly Gly Asn Ala Asn Asn Phe Ile Thr Lys Glu Glu Cys Glu Ser Thr
 45 50 55

tgt gct gcc tga 252
 Cys Ala Ala
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<210> 24

<211> 83

<212> PRT

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 20 25 30

Leu Leu Pro Asp Thr Gly Ser Cys Glu Asp Phe Thr Gly Ala Phe His
 35 40 45

Tyr Ser Thr Arg Asp Arg Glu Cys Ile Glu Phe Ile Tyr Gly Gly Cys
 50 55 60

Gly Gly Asn Ala Asn Asn Phe Ile Thr Lys Glu Glu Cys Glu Ser Thr
 65 70 75 80

Cys Ala Ala

<210> 25

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Met Ser Ser Gly Gly Leu Leu Leu Leu Leu Gly Leu Leu Thr Leu Trp	
-20	-15
	-10

gag gtg ctg acc ccc gtc tcc agc aag gac cgt cca aag ttc tgt gaa	96
Glu Val Leu Thr Pro Val Ser Ser Lys Asp Arg Pro Lys Phe Cys Glu	
-5	-1 1
	5

ctg cct gct gac atc gga cca tgg gat gac ttt acc gga gcc ttc cac	144
Leu Pro Ala Asp Ile Gly Pro Trp Asp Asp Phe Thr Gly Ala Phe His	
10	15
	20

tac agc cca cgt gaa cat gaa tgc ata gag ttt att tat ggt gga tgc	192
Tyr Ser Pro Arg Glu His Glu Cys Ile Glu Phe Ile Tyr Gly Gly Cys	
25	30
	35
	40

aaa ggg aat gct aac aac ttt aat acc caa gag caa tgc gaa agc acc	240
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	55

tgt gct gcc tga	252
Cys Ala Ala	
60	

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<213> Pseudonaja textilis

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	10
	15

Glu Val Leu Thr Pro Val Ser Ser Lys Asp Arg Pro Lys Phe Cys Glu	
20	25
	30

Leu Pro Ala Asp Ile Gly Pro Trp Asp Asp Phe Thr Gly Ala Phe His	
35	40
	45

Tyr Ser Pro Arg Glu His Glu Cys Ile Glu Phe Ile Tyr Gly Gly Cys	
50	55
	60

Lys Gly Asn Ala Asn Asn Phe Asn Thr Gln Glu Gln Cys Glu Ser Thr	
65	70
	75
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Cys Ala Ala

<210> 27

<211> 24

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: degenerate

80
XIV

sense primer

<400> 27
atgaargaya grchgaryt ngar

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<210> 28
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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:degenerate
antisense primer

<400> 28
gtrctytctt gytctytcy

18

<210> 29
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:gene-specific
forward primer for Txln1

<400> 29
atatatggat ccaaggaccg gcctgacttc

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<210> 30
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:gene-specific
reverse primer for Txln1

<400> 30
aacggaaatt ctcagagcc cacgtgctt c

31

<210> 31
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:gene-specific
reverse primer for Txln2

<400> 31
aacggaaatt ctcatgagcc acaggttagac tc

32

<210> 32

<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: RACE-ready long universal reverse primer

<400> 32
ctaatacgac tcactatagg gcaaggcgtg gtaacaacgc agagt

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<210> 33
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<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence: RACE-ready short universal reverse primer

<400> 33
ctaatacgac tcactatagg gc

22

<210> 34
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: RACE-ready nested universal reverse primer

<400> 34
aagcagtgg aacaacgcag agt

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<210> 35
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Txlnl-gene specific forward primer

<400> 35
atcagcggat ccatgtctgg aggt

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<210> 36
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Txlnl gene-specific reverse primer

<400> 36
tctcctgaat tctcaggcag cacaggt

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<210> 37
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Txln-active peptide sequence forward primer

<400> 37
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27

<210> 38
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<213> Artificial Sequence

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<223> Description of Artificial Sequence:gene-specific forward primer for txln2

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<210> 39
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:gene-specific forward primer for Txln3

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<223> Description of Artificial Sequence:gene-specifc forward primer for Txln4

<400> 40
aacgtcggat ccaaggacca tccaaaa

27

<210> 41
<211> 27

93
xvii

<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:gene-specific forward primer for Txln5

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aacgtcggat tcaaggaccc tccaaaaa

27

<210> 42
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:gene-specific forward primer for Txln6

<400> 42
attgtcggat ccaaggacct gccaaag

27

<210> 43
<211> 408
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Tyr Asn Pro Asp Glu Gln Lys Cys Leu Glu Phe Ile
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